# 2004 Water Quality Assessment (Final) - Category 5 Listings for WRIA 24

during 2001

WRIA	Listing ID Cat	egory	98 List?	Waterbody Name Basis	Location I	nformatio	n	Parameter			Parameter	Medium Remarks
24	6685	5	Y	COLUMBIA RIVER Hallock and Ehinger, 1993., excursions beyond criteria at Ilwaco Marina, from 9/92 to 12/92	<b>NN57SG</b> 2.;	46124D	0A3	46.30	5	124.035	Fecal Colifo	rm Water  Data is only available in hardcopy format. The water segment is listed as Category 5 based on the 1998 assessment.
24	8746	5	N	COLUMBIA RIVER  Johnson and Davis, 1996. excursion beyond the National Toxics Rule criterion (PCB-1254) Canby State Park Boat Launch.	NN57SG calculated for		-	<b>46.28</b> el samp	_	<b>124.055</b> ollected in 199	<b>Total PCBs</b> 5 from Fort	Tissue
24	6912	5	Y	<b>ELKHORN CREEK</b> Shoalwater Indian Tribal data (submitted by Michael Pollock on 10/30/97) show a 7-day mea	ZR45OU an of daily m	1.969 naximum t	_	<b>09W</b> ture of		deg. C during	Temperature	e Water
24	9983	5	N	FALLS CREEK  Data from the Dept. of Ecology EIM database for the Project WRTMDL01 (WILLAPA RIVER (FALLS CK ABV RETREAT CENTER) shows the geometric mean of 47 does not exceed the criterion from 8 samples collected during 1998.		R FECAL		DISSO	LVED			rm Water
24	9984	5	N	FERN CREEK  Data from the Dept. of Ecology EIM database for the Project WRTMDL01 (WILLAPA RIVER (FERN CREEK AT ELK PRAIRIE RD) shows the geometric mean of 199 exceeds the criteri 15 samples collected during 1998.		R FECAL		DISSO	LVED			
24	6867	5	N	FERN CREEK  Department of Ecology unpublished data from the Willapa TMDL Study shows a 7-day mear 2001 at station 14 (Fern Creek at Elk Prairie). Department of Ecology unpublished data from		aximum va		18.4 fc	or the			e Water

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WRIA L	isting ID Cate	egory	98 List?	Waterbody Name Basis	Location Info	ormation			Parameter	Medium Remarks
24	6843	5	Y	FORK CREEK  Department of Ecology unpublished data from the Willapa TMDL Study shows a 7-day mean 2001 at station 9 (Fork Creek at State Hatchery). Department of Ecology unpublished data for criterion during 2001;  Data from the Dept. of Ecology EIM database for the Project WRTMDL01 (WILLAPA RIVEI (Fork Creek) shows 1 excursions beyond the criterion measured on these dates: 98/08/04,  Data from the Dept. of Ecology EIM database for the Project WRTMDL01 (WILLAPA RIVEI 1 (Willapa Fish Hatchery) shows 1 excursions beyond the criterion measured on these dates.)  Department of Ecology unpublished data from the Willapa TMDL Study shows a 7-day mean 2001 at station 9a (Fork Creek abv State Hatchery). Department of Ecology unpublished data criterion during 2001  Washington Dept. of Fish and Wildlife data (submitted by Hal Michael on 14 September 1998) Willapa Hatchery.	R TMDL FOR R TMDL FOR S: 98/08/04, n of daily maxi ta from the W	mum value pa TMDL S FECALS A FECALS A mum value	.ND DISSC .ND DISSC .ND DISSC s of 17.6 fc L Study sho	or the week ending is 4 excursions bey obtained by the between the week ending ows 4 excursions by the week ending the week ending the week excursions by the week excursions by the week excursions by the week ending the week excursions by the week ending the week excursions by the week ending the week excursions by the week excursions by the week ending the week e	station FORK-1 station WFISH- 14 August beyond the	
24	6869	5	N	HALF MOON CREEK  Department of Ecology unpublished data from the Willapa TMDL Study shows a 7-day mear 2001 at station 12 (Half Moon Creek near mouth). Department of Ecology unpublished data criterion during 2001		mum value		or the week ending		Water
<b>24</b> data	6906	5	Y	JOE CREEK Weyerhaeuser Company data (submitted by Michael Pollock on 10/30/97) show 23 excursio the A2700 Toad at the bridge 02 miles west of Highway 101 during1996.	XG35GL 2		<b>N 08W</b> ut of 125 s		<b>Temperature</b> loe Creek off	'Continuous temperature measurements were taken, but were previously submitted only in hardcopy form. The water segment is listed as Category 5 based on the 1998 assessment.
<b>24</b> data	6907	5	Y	LITTLE NORTH RIVER  Weyerhaeuser Company data (submitted by Michael Pollock on 10/30/97) show 33 excursion Road, 0.1 miles west of Highway 101 during 1996.  Shoalwater Indian Tribal data (submitted by Michael Pollock on 10/30/97) show a 7-day mean result.	ŕ	criterion o	ut of 125 s	amples (26%) sou		
<b>24</b> data	6909	5	Y	LITTLE NORTH RIVER Weyerhaeuser Company data (submitted by Michael Pollock on 10/30/97) show 39 excursio Line, 200 feet above bridge during1996.	WU17DR 1				Temperature	

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Basis

Remarks

### 24 35307 5 N MARTIN CREEK

FW86AP 0.566 15N 06W 28

Temperature

Water

Port Blakely Tree Farms unpublished data from station M1 (submitted by Blake Murden on 10 Decemeber 2002) shows a 7-day mean of daily maximum values of 17.78 degrees C from continuous measurements collected in 2002. Port Blakely Tree Farms unpublished data from station M1 (submitted by Blake Murden on 10 Decemeber 2002) shows a 7-day mean of daily maximum values of 15.85 degrees C from continuous measurements collected in 2001. Port Blakely Tree Farms unpublished data from station M1 (submitted by Blake Murden on 10 Decemeber 2002) shows a 7-day mean of daily maximum values of 17.5 degrees C from continuous measurements collected in 2000. Port Blakely Tree Farms unpublished data from station M1 (submitted by Blake Murden on 10 Decemeber 2002) shows a 7-day mean of daily maximum values of 16.7 degrees C from continuous measurements collected in 1999. Port Blakely Tree Farms unpublished data from station M1 (submitted by Blake Murden on 10 Decemeber 2002) shows a 7-day mean of daily maximum values of 20.5 degrees C from continuous measurements collected in 1998. Port Blakely Tree Farms unpublished data from station M1 (submitted by Blake Murden on 10 Decemeber 2002) shows a 7-day mean of daily maximum values of 19.6 degrees C from continuous measurements collected in 1996.

Port Blakely Tree Farms unpublished data from station M1 (submitted by Blake Murden on 10 December 2002) shows no excursions beyond the criterion from measurements collected in 2001-2002.

Port Blakely Tree Farms unpublished data from station M2 (submitted by Blake Murden on 10 December 2002) shows no excursions beyond the criterion from measurements collected in 2001-2002.

Port Blakely Tree Farms unpublished data from station M4 (submitted by Blake Murden on 10 December 2002) shows no excursions beyond the criterion from measurements collected in 2001-2002.

Port Blakely Tree Farms unpublished data from station M4 (submitted by Blake Murden on 10 Decemeber 2002) shows a 7-day mean of daily maximum values of 17.6 degrees C from continuous measurements collected in 2002. Port Blakely Tree Farms unpublished data from station M4 (submitted by Blake Murden on 10 Decemeber 2002) shows a 7-day mean of daily maximum values of 16.49 degrees C from continuous measurements collected in 2001. Port Blakely Tree Farms unpublished data from station M4 (submitted by Blake Murden on 10 Decemeber 2002) shows a 7-day mean of daily maximum values of 17.4 degrees C from continuous measurements collected in 2000. Port Blakely Tree Farms unpublished data from station M4 (submitted by Blake Murden on 10 Decemeber 2002) shows a 7-day mean of daily maximum values of 16.4 degrees C from continuous measurements collected in 1999. Port Blakely Tree Farms unpublished data from station M4 (submitted by Blake Murden on 10 Decemeber 2002) shows a 7-day mean of daily maximum values of 19.2 degrees C from continuous measurements collected in 1998. Port Blakely Tree Farms unpublished data from station M4 (submitted by Blake Murden on 10 Decemeber 2002) shows a 7-day mean of daily maximum values of 18.3 degrees C from continuous measurements collected in 1997. Port Blakely Tree Farms unpublished data from station M4 (submitted by Blake Murden on 10 Decemeber 2002) shows a 7-day mean of daily maximum values of 19.1 degrees C from continuous measurements collected in 1996.

Port Blakely Tree Farms unpublished data from station M2\* (submitted by Blake Murden on 10 December 2002) shows a 7-day mean of daily maximum values of 17.25 degrees C from continuous measurements collected in 2002. Port Blakely Tree Farms unpublished data from station M2\* (submitted by Blake Murden on 10 December 2002) shows a 7-day mean of daily maximum values of 16.3 degrees C from continuous measurements collected in 2001.

### 24 35312 5 N MARTIN CREEK

FW86AP 5.226 15N 06W 35

Temperature

Water

Port Blakely Tree Farms unpublished data from station M8\* (submitted by Blake Murden on 10 December 2002) shows a 7-day mean of daily maximum values of 19.68 degrees C from continuous measurements collected in 2002. Port Blakely Tree Farms unpublished data from station M8\* (submitted by Blake Murden on 10 December 2002) shows a 7-day mean of daily maximum values of 13.72 degrees C from continuous measurements collected in 2001.

Port Blakely Tree Farms unpublished data from station M8 (submitted by Blake Murden on 10 December 2002) shows no excursions beyond the criterion from measurements collected in 2001-2002.

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WU17DR 0

15N 10W 99

**Fecal Coliform** 

Seyferlich and Joy, 1993. multiple excursions beyond the criterion at DOH station 8 in the North River Commercial Shellfish Area between 10/88 and 4/90. This station is no longer sampled by Department of Health to determine classification status in

6690

24

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Υ

**NORTH RIVER** 

Data is only available in hardcopy format. The water segment is listed as Category 5 based on the 1998 assessment.

Water

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WRIA	Listing ID Categ	gory 9	98 List?	Waterbody Name Basis	Location Information	Parameter	Medium Remarks
24	6691	5	Y	NORTH RIVER Seyferlich and Joy, 1993., multiple excursions beyond the criterion at DOH station 9 in the No station is no longer sampled by Department of Health to determine classification status in the		Fecal Colifor nd 4/90. This	Data is only available in hardcopy format. The water segment is listed as Category 5 based on the 1998 assessment.
24	6913	5	Y	NORTH RIVER Shoalwater Indian Tribal data (submitted by Michael Pollock on 10/30/97) show a 7-day mean	WU17DR 46.255 16N 08W 09 n of daily maximum temperature of 20.6 deg. C during	Temperature	Water
<b>24</b> data	6905	5	Y	NORTH RIVER, E.F. Weyerhaeuser Company data (submitted by Michael Pollock on 10/30/97) show 10 excursion North River 100 feet above A-Line Road during1996.	QG10AL 0.092 16N 09W 29 as beyond the criterion out of 125 samples (13%) on the	<b>Temperature</b> he East Fork	
24	8751	5	Y	PACIFIC COUNTY DRAINAGE DITCH NO. 1 (PCDD-1)  Davis 1998. show 3 excursions beyond the National Toxics Rule criterion out of 3 samples of Davis, 1997. 4 samples exceeded the state criterion from samples collected in 1994 and 1995.		4,4'-DDD	Water  Davis 1998 basis moved from Listing ID 12861 to this listing on 01/21/05kk  EPA listed this waterbody in 1998 based on State chronic standard 0.001 ug/l.
24	8747	5	Y	PACIFIC COUNTY DRAINAGE DITCH NO. 1 (PCDD-1)  Davis, 1997. 21 out of 26 samples exceeded the EPA recommended criterion from samples	YF44AK 3.149 15N 11W 32 collected in 1994 and 1995	Azinphos-Me	Recent sampling shows that this water continues to be impaired for azinphos-Methyl (Boyd, ECY/SWRO, 2003).  EPA listed this waterbody in 1998 based on EPA recommended criterion 0.01 ug/l, that is not adopted as a state standard.
24	8749	5	Y	PACIFIC COUNTY DRAINAGE DITCH NO. 1 (PCDD-1)  Davis 1997. shows 17 out of 26 samples exceeded the state standard standards from samp  Davis 1998. show no excursions beyond the chronic criterion out of 3 samples collected at st		Chlorpyrifos	Water EPA listed this waterbody in 1998 based on State acute standard - 0.083 ug/l, State chronic standard - 0.041 ug/l.
24	40571	5	Y	PACIFIC COUNTY DRAINAGE DITCH NO. 1 (PCDD-1)  Coots (2003) show excursions beyond the chronic criterion collected on 18 July 2002 and 1 A	<b>YF44AK 4.931 15N 11W 29</b> Aug 2002.	Chlorpyrifos	Water TRS was 15N-11W-32 on 1998 listkk

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WRIA	Listing ID Cat	egory	98 List?	Waterbody Name Basis	Location	Informatio	n			Parameter	Medium Remarks
				Dasis							Remarks
24	8748	5	Υ	PACIFIC COUNTY DRAINAGE DITCH NO. 1 (PCDD-1)	YF44AK	3.149	15N	11W	32	Diazinon	Water
				Davis, 1997. show 17 out of 25 samples exceeded the EPA guidelines from samples collections.	ted in 1994	and 1995	j.				Recent sampling shows that this water continues to be impaired for diasinon (Boyd, ECY/SWRO, 2003).
											EPA listed this waterbody in 1998 based on EPA guidelines maximum acute - 0.08 ug/l, continuous chronic - 0.04 ug/l, that is not adopted as a state standard.
24	35926	5	N	RAIMIE CREEK	PY40HQ	2.061	15N	06W	16	рН	Water
				Port Blakely Tree Farms unpublished data from station LR1 (submitted by Blake Murden on measurements collected in 2001-2002.	10 Decem	eber 2002	) shows	s 3 exc	ursions beyond the	e criterion from 3	Low pH
24	35306	5	N	RAIMIE CREEK	PY40HQ	2.061	15N	06W	16	Temperature	e Water
				Port Blakely Tree Farms unpublished data from station LR1 (submitted by Blake Murden on of 18.26 degrees C from continuous measurements collected in 2002. Port Blakely Tree Fa on 10 Decemeber 2002) shows a 7-day mean of daily maximum values of 17.13 degrees C Farms unpublished data from station LR1 (submitted by Blake Murden on 10 Decemeber 20 from continuous measurements collected in 2000. Port Blakely Tree Farms unpublished da 2002) shows a 7-day mean of daily maximum values of 16.9 degrees C from continuous medata from station LR1 (submitted by Blake Murden on 10 Decemeber 2002) shows a 7-day measurements collected in 1998. Port Blakely Tree Farms unpublished data from station L day mean of daily maximum values of 19.3 degrees C from continuous measurements collected in 2004 2009.	rms unpub from contir 002) shows ta from state assurement mean of da R1 (submit cted in 199	lished dat nuous mea a 7-day n tion LR1 ( s collecter ily maxim ted by Bla 6.	a from sasurements of submitted in 199um valuke Mure	station ents co daily n ed by E 99. Pol les of 2 den on	LR1 (submitted by illected in 2001. Pon aximum values of Blake Murden on 10 the Blakely Tree Farr 20.1 degrees C from 10 Decemeber 20	Blake Murden ort Blakely Tree 17.9 degrees C D Decemeber ms unpublished in continuous 102) shows a 7-	
24	35880	5	N	measurements collected in 2001-2002.  PAIMIE CREEK PIGHT FORK	VMOZEV	4 506	45N	OC/W	02	- Li	Water
24	33000	5	N	RAIMIE CREEK, RIGHT FORK	KM97FX	4.506	NCI	06W	UZ	рН	water

Port Blakely Tree Farms unpublished data from station UR2 (submitted by Blake Murden on 10 December 2002) shows 3 excursions beyond the criterion from 4 Low pH measurements collected in 2001-2002.

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Basis

#### REDFIELD CREEK 35314 Ν DC21FZ 1.53 15N 06W 22 **Temperature**

Port Blakely Tree Farms unpublished data from station R1 (submitted by Blake Murden on 10 December 2002) shows a 7-day mean of daily maximum values of 16.7 degrees C from continuous measurements collected in 2002. Port Blakely Tree Farms unpublished data from station R1 (submitted by Blake Murden on 10 December 2002) shows a 7-day mean of daily maximum values of 15.96 degrees C from continuous measurements collected in 2001. Port Blakely Tree Farms unpublished data from station R1 (submitted by Blake Murden on 10 December 2002) shows a 7-day mean of daily maximum values of 16.8 degrees C from continuous measurements collected in 2000. Port Blakely Tree Farms unpublished data from station R1 (submitted by Blake Murden on 10 December 2002) shows a 7-day mean of daily maximum values of 15.9 degrees C from continuous measurements collected in 1999. Port Blakely Tree Farms unpublished data from station R1 (submitted by Blake Murden on 10 December 2002) shows a 7-day mean of daily maximum values of 18.6 degrees C from continuous measurements collected in 1998. Port Blakely Tree Farms unpublished data from station R1 (submitted by Blake Murden on 10 December 2002) shows a 7-day mean of daily maximum values of 17.8 degrees C from continuous measurements collected in 1997.

Water

Water

Water

Temperature

Fecal Coliform

Port Blakely Tree Farms unpublished data from station R1 (submitted by Blake Murden on 10 December 2002) shows no excursions beyond the criterion from measurements collected in 2001-2002.

Port Blakely Tree Farms unpublished data from station R2 (submitted by Blake Murden on 10 December 2002) shows no excursions beyond the criterion from measurements collected in 2001-2002.

Port Blakely Tree Farms unpublished data from station R2\* (submitted by Blake Murden on 10 December 2002) shows a 7-day mean of daily maximum values of 16.37 degrees C from continuous measurements collected in 2002. Port Blakely Tree Farms unpublished data from station R2\* (submitted by Blake Murden on 10 December 2002) shows a 7-day mean of daily maximum values of 15.57 degrees C from continuous measurements collected in 2001.

#### 24 35316 5 Ν REDFIELD CREEK DC21FZ 2.613 15N 06W 15

Port Blakely Tree Farms unpublished data from station R4 (submitted by Blake Murden on 10 December 2002) shows a 7-day mean of daily maximum values of 17.55 degrees C from continuous measurements collected in 2002. Port Blakely Tree Farms unpublished data from station R4 (submitted by Blake Murden on 10 December 2002) shows a 7-day mean of daily maximum values of 15.98 degrees C from continuous measurements collected in 2001. Port Blakely Tree Farms unpublished data from station R4 (submitted by Blake Murden on 10 December 2002) shows a 7-day mean of daily maximum values of 16.6 degrees C from continuous measurements collected in 2000. Port Blakely Tree Farms unpublished data from station R4 (submitted by Blake Murden on 10 December 2002) shows a 7-day mean of daily maximum values of 16 degrees C from continuous measurements collected in 1999. Port Blakely Tree Farms unpublished data from station R4 (submitted by Blake Murden on 10 December 2002) shows a 7-day mean of daily maximum values of 19.3 degrees C from continuous measurements collected in 1998. Port Blakely Tree Farms unpublished data from station R4 (submitted by Blake Murden on 10 December 2002) shows a 7-day mean of daily maximum values of 19.2 degrees C from continuous measurements collected in 1997.

Port Blakely Tree Farms unpublished data from station R4 (submitted by Blake Murden on 10 December 2002) shows no excursions beyond the criterion from measurements collected in 2001-2002.

#### RIVERDALE CREEK 24 9989 5 Ν

Data from the Dept, of Ecology EIM database for the Project WRTMDL01 (WILLAPA RIVER TMDL FOR FECALS AND DISSOLVED OXYGEN) station RAYSW-3 (RIVERDALE CREEK AT LIONS CLUB PARK) shows the geometric mean of 2914 exceeds the criterion and that 92 % of the samples exceeds the percentile criterion from 12 samples collected during 1998.

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14N 09W 24

WRIA	NRIA Listing ID Category 98 Lis		98 List?	Waterbody Name Basis	Location Ir	nformation	1			Parameter Remari	Medium
										rtonan	
24	6911	5	Υ	SALMON CREEK, UPPER	UR98MB	0	16N	W80	09	Temperature	Water
				Shoalwater Indian Tribal data (submitted by Michael Pollock on 10/30/97) show a 7-day mea	n of daily m	aximum t	empera	ature o	of 19.7 deg.	C during 1997.	
24	3779	5	Υ	SMITH CREEK	VP01ZH	35.381	15N	08W	23	Temperature	Water
	0.10	·	•	Sullivan, et al. 1990, 27 excursions beyond the criterion measured during 1988.	VI 01211	00.001	1011	0011	20	•	uous temperature measurements were taken, but data
											reviously submitted only in hardcopy form. The water nt is listed as Category 5 based on the 1998 ment.
24	35320	5	N	SULLIVAN CREEK	HP04GB	0.198	15N	06W	10	Temperature	Water
				Port Blakely Tree Farms unpublished data from station SC2 (submitted by Blake Murden on	10 Deceme	ber 2002)	shows	s a 7-d	lay mean of	f daily maximum values	

Port Blakely Tree Farms unpublished data from station SC2 (submitted by Blake Murden on 10 Decemeber 2002) shows a 7-day mean of daily maximum values of 16.67 degrees C from continuous measurements collected in 2002. Port Blakely Tree Farms unpublished data from station SC2 (submitted by Blake Murden on 10 Decemeber 2002) shows a 7-day mean of daily maximum values of 13.16 degrees C from continuous measurements collected in 2001. Port Blakely Tree Farms unpublished data from station SC2 (submitted by Blake Murden on 10 Decemeber 2002) shows a 7-day mean of daily maximum values of 16.8 degrees C from continuous measurements collected in 2000. Port Blakely Tree Farms unpublished data from station SC2 (submitted by Blake Murden on 10 Decemeber 2002) shows a 7-day mean of daily maximum values of 16.2 degrees C from continuous measurements collected in 1999. Port Blakely Tree Farms unpublished data from station SC2 (submitted by Blake Murden on 10 Decemeber 2002) shows a 7-day mean of daily maximum values of 18.6 degrees C from continuous measurements collected in 1998. Port Blakely Tree Farms unpublished data from station SC2 (submitted by Blake Murden on 10 Decemeber 2002) shows a 7-day mean of daily maximum values of 17.4 degrees C from continuous measurements collected in 1997. Port Blakely Tree Farms unpublished data from station SC2 (submitted by Blake Murden on 10 Decemeber 2002) shows a 7-day mean of daily maximum values of 17.2 degrees C from continuous measurements collected in 1996.

Port Blakely Tree Farms unpublished data from station SC1 (submitted by Blake Murden on 10 December 2002) shows no excursions beyond the criterion from measurements collected in 2001-2002.

Port Blakely Tree Farms unpublished data from station SC2 (submitted by Blake Murden on 10 December 2002) shows no excursions beyond the criterion from measurements collected in 2001-2002.

Port Blakely Tree Farms unpublished data from station SC1 (submitted by Blake Murden on 10 Decemeber 2002) shows a 7-day mean of daily maximum values of 15.02 degrees C from continuous measurements collected in 2002. Port Blakely Tree Farms unpublished data from station SC1 (submitted by Blake Murden on 10 Decemeber 2002) shows a 7-day mean of daily maximum values of 14.46 degrees C from continuous measurements collected in 2001. Port Blakely Tree Farms unpublished data from station SC1 (submitted by Blake Murden on 10 Decemeber 2002) shows a 7-day mean of daily maximum values of 14.4 degrees C from continuous measurements collected in 2000. Port Blakely Tree Farms unpublished data from station SC1 (submitted by Blake Murden on 10 Decemeber 2002) shows a 7-day mean of daily maximum values of 15.3 degrees C from continuous measurements collected in 1999. Port Blakely Tree Farms unpublished data from station SC1 (submitted by Blake Murden on 10 Decemeber 2002) shows a 7-day mean of daily maximum values of 16.4 degrees C from continuous measurements collected in 1997. Port Blakely Tree Farms unpublished data from station SC1 (submitted by Blake Murden on 10 Decemeber 2002) shows a 7-day mean of daily maximum values of 16.7 degrees C from continuous measurements collected in 1996.

24 9995 5 N UNNAMED CREEK AX11QJ 0 14N 09W 28 Fecal Coliform Water

Data from the Dept. of Ecology EIM database for the Project WRTMDL01 (WILLAPA RIVER TMDL FOR FECALS AND DISSOLVED OXYGEN) station SBSW-2 (Creek @ Coast Seafood) shows the geometric mean of 911 exceeds the criterion and that 82 % of the samples exceeds the percentile criterion from 11 samples collected during 1998.

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WRIA	Listing ID Cat	egory	98 List?	Waterbody Name Basis	Location In	nformation		Р	arameter	Remarks	Medium
<b>24</b> data	6908	5	N	UNNAMED CREEK Weyerhaeuser Company data (submitted by Michael Pollock on 10/30/97) show 34 excursion North River at the end of C300 Road, approximately 0.2 miles up from the confluence during	ions beyond tl	20.141 16N he criterion out			Temperature	'Continuous temperat	Nater ture measurements were taken, but nitted only in hardcopy form. The water Category 5 based on the 1998
24	6689	5	Y	WILLAPA BAY Seyferlich and Joy, 1993., multiple excursions beyond the criterion at DOH station 5 in the station is no longer sampled by Department of Health to determine classification status in the Department of Health Annual Growing Area Review station BRUCEPORT-97 shows a geometric sample collected on 12/03/2001.	he			etween 11/89 and		Data from Seyferlich hardcopy format. The based on the 1998 as	e water segment is listed as Category 5
24	9511	5	N	WILLAPA RIVER  Data from the Dept. of Ecology EIM database for the Project WRTMDL01 (WILLAPA RIVE (Willapa R at Johnson SI) shows 1 excursions beyond the criterion measured on these date. Data from the Dept. of Ecology EIM database for the Project WRTMDL01 (WILLAPA RIVE AL1 (WILLAPA R AT JOHNSON SL) shows 0 excursions beyond the criterion out of 1 same. Data from the Dept. of Ecology EIM database for the Project WRTMDL01 (WILLAPA RIVE AR1 (WILLAPA R AT JOHNSON SL) shows 0 excursions beyond the criterion out of 3 same. Newton et al. (1998) Dept. of Ecology Ambient Monitoring Station WPA003 (Willapa Bay - World 85 samples collected between 1993-2000	ER TMDL FOI es: 98/09/02, ER TMDL FOI nples collected ER TMDL FOI mples collected	R FECALS ANI d between 04/ R FECALS ANI d between 04/	D DISSOLVE D DISSOLVE 198 - 12/98. D DISSOLVE 1/98 - 12/98.	ED OXYGEN) stat ED OXYGEN) stat ED OXYGEN) stat	tion WRJS-	TMDL is in progress, exceedances (Unpub River Total Maximum Report).	<b>Nater</b> data for current study show lished data from Ecology 2000, Willapa Daily Load Study Data Summary
24	10352	5	Y	WILLAPA RIVER  Nowton et al. (1998) Dont of Ecology Ambient Monitoring Station WPA001 (Williams Ray, W		10.268 14N			Dissolved ox	, ,	Vater

Newton et al. (1998) Dept. of Ecology Ambient Monitoring Station WPA001 (Willapa Bay - Willapa R. Raymond) shows 12 excursions beyond the criterions out of 89 samples collected between 1993-2000

TMDL is in progress, data for current study show exceedances (Unpublished data from Ecology 20

Data from the Dept. of Ecology EIM database for the Project WRTMDL01 (WILLAPA RIVER TMDL FOR FECALS AND DISSOLVED OXYGEN) station WRRA-1 Report). (Willapa R at Raymond (nr Port)) shows 6 excursions beyond the criterion measured on these dates: 98/05/05, 98/05/27, 98/07/31, 98/08/05, 98/09/02, 98/11/04

Data from the Dept. of Ecology EIM database for the Project WRTMDL01 (WILLAPA RIVER TMDL FOR FECALS AND DISSOLVED OXYGEN) station WRRA-AL1 (WILLAPA R AT RAYMOND (NR PORT)) shows 5 excursions beyond the criterion measured on these dates: 98/05/27, 98/06/17, 98/07/15, 98/10/06, 98/10/07,

Data from the Dept. of Ecology EIM database for the Project WRTMDL01 (WILLAPA RIVER TMDL FOR FECALS AND DISSOLVED OXYGEN) station WRRA-AR1 (WILLAPA R AT RAYMOND (NR PORT)) shows 1 excursions beyond the criterion measured on these dates: 98/10/06,

TMDL is in progress, data for current study show exceedances (Unpublished data from Ecology 2000, Willapa River Total Maximum Daily Load Study Data Summary Report).

A review of the salinity data for station WPA001 by Pickett (1998) shows that 95% of the vertically-averaged salinity measurements are below 24.4 ppt, and about 26% of the measurements are below 10 ppt, so the marine standards should apply for station WPA001.

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WRIA	Listing ID Cate	gory	98 List?	Waterbody Name Basis	Location I	Informa	ation				Parameter	Remarks	Medium
24	14882	5	N	WILLAPA RIVER	YN05JR	3.78	B1 14N	N O	9W 2	28	Dissolved of	xygen	Water
				Data from the Dept. of Ecology EIM database for the Project WRTMDL01 (WILLAPA RIVE (Willapa R below S Bend) shows 4 excursions beyond the criterion measured on these date							) station WRSB-1	exceedances (Unp	ss, data for current study show ublished data from Ecology 2000, Willapa um Daily Load Study Data Summary
				Data from the Dept. of Ecology EIM database for the Project WRTMDL01 (WILLAPA RIVE (Willapa R below S Bend) shows 1 excursions beyond the criterion measured on these date			CALS AN	ND D	DISSOL	_VED OXYGEN	) station WRSB-1		an Bany Load Glady Bala Gammary
				Data from the Dept. of Ecology EIM database for the Project WRTMDL01 (WILLAPA RIVE (Willapa R below S Bend) shows 1 excursions beyond the criterion measured on these data			CALS AN	ND D	DISSOL	_VED OXYGEN	) station WRSB-1		
24	14951	5	N	WILLAPA RIVER	YN05JR	56.6	69 12N	N C	)7W (	04	Dissolved of	xygen	Water
				Data from the Dept. of Ecology EIM database for the Project WRTMDL01 (WILLAPA RIVER (Willapa R at Lebam) shows 0 excursions beyond the criterion out of 4 samples collected be				D DI	SSOL\	VED OXYGEN)	station WRLE-1	exceedances (Unp	ss, data for current study show ublished data from Ecology 2000, Willapa um Daily Load Study Data Summary
43026.													cause it errantly identified the location as bugh" and "at Lebam". See Listing ID
43020.												01/06/05 -kk	
24	14952	5	N	WILLAPA RIVER	YN05JR	12.2	229 14N	N C	<b>08W</b> 1	19	Dissolved of	xygen	Water
				Data from the Dept. of Ecology EIM database for the Project WRTMDL01 (WILLAPA RIVE (Willapa R at Hwy 101 Bridge) shows 4 excursions beyond the criterion measured on these							) station WRHY-1	exceedances (Unp	ss, data for current study show ublished data from Ecology 2000, Willapa um Daily Load Study Data Summary
				Data from the Dept. of Ecology EIM database for the Project WRTMDL01 (WILLAPA RIVE (Willapa R at Hwy 101 Bridge) shows 1 excursions beyond the criterion measured on these			CALS AN	ND D	DISSOL	_VED OXYGEN	) station WRHY-1		an Bully Load Glady Bala Guilliary
24	14961	5	N	WILLAPA RIVER	YN05JR	22.4	I15 14N	N O	08W 2	27	Dissolved of	xygen	Water
				Data from the Dept. of Ecology EIM database for the Project WRTMDL01 (WILLAPA RIVE (Willapa R at Willapa Road) shows 2 excursions beyond the criterion collected on 98/09/02			CALS AN	ND D	DISSOL	_VED OXYGEN	) station WRWI-1	exceedances (Unp	ss, data for current study show ublished data from Ecology 2000, Willapa um Daily Load Study Data Summary
				Data from the Dept. of Ecology EIM database for the Project WRTMDL01 (WILLAPA RIVE (Willapa R at Willapa Road) shows 0 excursions beyond the criterion out of 4 samples college.						_VED OXYGEN	) station WRWI-1		ani Dany Load Study Data Summary
24	43026	5	N	WILLAPA RIVER	YN05JR	14.7	735 14N	N O	08W 2	20	Dissolved of	xygen	Water
				Data from the Dept. of Ecology EIM database for the Project WRTMDL01 (WILLAPA RIVER (Willapa R near Ellis Slough) shows 4 excursions beyond the criterion measured on these databases.							station WREL-1	exceedances (Unp	ss, data for current study show ublished data from Ecology 2000, Willapa um Daily Load Study Data Summary
				Data from the Dept. of Ecology EIM database for the Project WRTMDL01 (WILLAPA RIVER (Willapa R near Ellis Slough) shows 1 excursions beyond the criterion measured on this database.			ALS ANI	D DI	SSOL\	VED OXYGEN)	station WREL-1	Report).	,, zama camman,
				Comments and the second of the	00,00,0E.	-							O 14951 on 01/06/05. Previous listing ed listings near Ellis Slough with listings

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24 6688 5 Y WILLAPA RIVER YN05JR 2.576 14N 09W 21 Fecal Coliform Water

Seyferlich and Joy, 1993., multiple excursions beyond the criterion at DOH station 2 (Willapa RM 1.9) in the Bruceport Commercial Shellfish Area between 11/89 and 6/91. This station is no longer sampled by Department of Health to determine classificat

Data is only available in hardcopy format. The water segment is listed as Category 5 based on the 1998 assessment.

24 9998 5 Y WILLAPA RIVER YN05JR 10,268 14N 09W 24 Fecal Coliform Water

Data from the Dept. of Ecology EIM database for the Project WRTMDL01 (WILLAPA RIVER TMDL FOR FECALS AND DISSOLVED OXYGEN) station WRRA-AR1 (WILLAPA R AT RAYMOND (NR PORT)) shows the geometric mean of 29 does not exceed the criterion and that 17 % of the samples exceeds the percentile criterion from 30 samples collected during 1998.

Newton et al. (1998) Dept. of Ecology Ambient Monitoring Station Station WPA001 (Willapa Bay - Willapa R. Raymond) shows a geometric mean of 17 exceeds the marine criterion and that 0% of the samples does not exceed the percentile criterion from 6 samples collected during 1992. Newton et al. (1998) Dept. of Ecology Ambient Monitoring Station Station WPA001 (Willapa Bay - Willapa R. Raymond) shows a geometric mean of 15 exceeds the marine criterion and that 0% of the samples does not exceed the percentile criterion from 7 samples collected during 1993. Newton et al. (1998) Dept. of Ecology Ambient Monitoring Station Station WPA001 (Willapa Bay - Willapa R. Raymond) shows a geometric mean of 19 exceeds the marine criterion and that 0% of the samples does not exceed the percentile criterion from 9 samples collected during 1994. Newton et al. (1998) Dept. of Ecology Ambient Monitoring Station Station WPA001 (Willapa Bay - Willapa R. Raymond) shows a geometric mean of 33 exceeds the marine criterion and that 0% of the samples does not exceed the percentile criterion from 11 samples collected during 1995. Newton et al. (1998) Dept. of Ecology Ambient Monitoring Station Station WPA001 (Willapa Bay - Willapa R. Raymond) shows a geometric mean of 37 exceeds the marine criterion and that 11% of the samples does not exceed the percentile criterion from 9 samples collected during 1996. Newton et al. (1998) Dept. of Ecology Ambient Monitoring Station Station WPA001 (Willapa Bay - Willapa R. Raymond) shows a geometric mean of 40 exceed the marine criterion and that 0% of the samples does not exceed the percentile criterion from 10 samples collected during 1997. Newton et al. (1998) Dept. of Ecology Ambient Monitoring Station Station WPA001 (Willapa Bay - Willapa R. Raymond) shows a geometric mean of 22 exceeds the marine criterion and that 11% of the samples does not exceed the percentile criterion from 9 samples collected during 1998. Newton et al. (1998) Dept. of Ecology Ambient Monitoring Station Station WPA001 (Willapa Bay - Willapa R. Raymond) shows a geometric mean of 7 does not exceed the marine criterion and that 0% of the samples does not exceed the percentile criterion from 8 samples collected during 1999. Newton et al. (1998) Dept. of Ecology Ambient Monitoring Station Station WPA001 (Willapa Bay - Willapa R. Raymond) shows a geometric mean of 16 exceeds the marine criterion and that 0% of the samples does not exceed the percentile criterion from 9 samples collected during 2000.

24 10000 5 N WILLAPA RIVER YN05JR 12.229 14N 08W 19 Fecal Coliform Water

Data from the Dept. of Ecology EIM database for the Project WRTMDL01 (WILLAPA RIVER TMDL FOR FECALS AND DISSOLVED OXYGEN) station WRHY-AR1 (WILLAPA R AT HWY 101 BRIDGE) shows the geometric mean of 34 does not exceed the criterion and that 14 % of the samples exceeds the percentile criterion from 28 samples collected during 1998.

24 10001 5 N WILLAPA RIVER YN05JR 22.415 14N 08W 27 Fecal Coliform Water

Data from the Dept. of Ecology EIM database for the Project WRTMDL01 (WILLAPA RIVER TMDL FOR FECALS AND DISSOLVED OXYGEN) station WRWI-1 (Willapa R at Willapa Road) shows the geometric mean of 69 does not exceed the criterion and that 17% of the samples exceeds the percentile criterion from 29 samples collected during 1998.

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### Remarks

Water

**Fecal Coliform** 

### **WILLAPA RIVER** 10002 5 Ν

YN05JR 28.147 13N 08W 52

Hallock (2004), Dept. of Ecology ambient station 24B090 shows 3 of 4 samples (75%) in year 2001 exceeded the percentile criterion and 2 of 12 samples (16.7%) in year 2002 exceeded the percentile criterion.

Hallock (2001) Dept. of Ecology Ambient Monitoring Station 24B090 (Willapa R. near Willapa) shows a geometric mean of 80 does not exceed the criterion and that 33% of the samples exceeds the percentile criterion from 9 samples collected during 2001.

Hallock (2001) Dept. of Ecology Ambient Monitoring Station 24B090 (Willapa R. near Willapa) shows a geometric mean of 24 does not exceed the criterion and that 0% of the samples does not exceed the percentile criterion from 12 samples collected during 2000.

Hallock (2001) Dept. of Ecology Ambient Monitoring Station 24B090 (Willapa R. near Willapa) shows a geometric mean of 102 exceeds the criterion and that 17% of the samples exceeds the percentile criterion from 12 samples collected during 1999.

Hallock (2001) Dept. of Ecology Ambient Monitoring Station 24B090 (Willapa R. near Willapa) shows a geometric mean of 77 does not exceed the criterion and that 8% of the samples does not exceed the percentile criterion from 12 samples collected during 1998.

Data from the Dept. of Ecology EIM database for the Project WRTMDL01 (WILLAPA RIVER TMDL FOR FECALS AND DISSOLVED OXYGEN) station WRC1-1 (Willapa R at Camp One Rd) shows the geometric mean of 77 does not exceed the criterion and that 17% of the samples exceeds the percentile criterion from 35 samples collected during 1998.

Hallock (2001) Dept. of Ecology Ambient Monitoring Station 24B090 (Willapa R. near Willapa) shows a geometric mean of 87 does not exceed the criterion and that 33% of the samples exceeds the percentile criterion from 12 samples collected during 1997.

Hallock (2001) Dept. of Ecology Ambient Monitoring Station 24B090 (Willapa R. near Willapa) shows a geometric mean of 97 does not exceed the criterion and that 33% of the samples exceeds the percentile criterion from 6 samples collected during 1996.

Hallock (2001) Dept. of Ecology Ambient Monitoring Station 24B090 (Willapa R. near Willapa) shows a geometric mean of 77 does not exceed the criterion and that 36% of the samples exceeds the percentile criterion from 11 samples collected during 1995.

Hallock (2001) Dept. of Ecology Ambient Monitoring Station 24B090 (Willapa R. near Willapa) shows a geometric mean of 371 exceeds the criterion and that 67% of the samples exceeds the percentile criterion from 3 samples collected during 1994.

### **WILLAPA RIVER** 10003 5 Ν

YN05JR 34.991 13N 08W 14

**Fecal Coliform** 

Water

Data from the Dept, of Ecology EIM database for the Project WRTMDL01 (WILLAPA RIVER TMDL FOR FECALS AND DISSOLVED OXYGEN) station WRMN-1 (Willapa R at SR 6 nr Menlo) shows the geometric mean of 101 exceeds the criterion and that 27 % of the samples exceeds the percentile criterion from 15 samples collected during 1998.

### 10004 Ν **WILLAPA RIVER** 24

YN05JR 41.711 13N 08W 48

**Fecal Coliform** 

Water

Data from the Dept. of Ecology EIM database for the Project WRTMDL01 (WILLAPA RIVER TMDL FOR FECALS AND DISSOLVED OXYGEN) station WROX-1 (Willapa R at Oxbow Road) shows the geometric mean of 70 does not exceed the criterion and that 20 % of the samples exceeds the percentile criterion from 15 samples collected during 1998.

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WRIA	Listing ID Cate	gory	98 List?	Waterbody Name	Location In	nformati	on			Parameter		Medium
				Basis						1	Remarks	
24	10006	5	Υ	WILLAPA RIVER	YN05JR	56.69	121	I 07W	04	Fecal Coliforn	n	Water
				Data from the Dept. of Ecology EIM database for the Project WRTMDL01 (WIL (Willapa R at Lebam) shows the geometric mean of 140 exceeds the criterion a collected during 1998.								
24	10007	5	N	WILLAPA RIVER	YN05JR	59.12	9 121	I 07W	03	Fecal Coliforn	n	Water
				Data from the Dept. of Ecology EIM database for the Project WRTMDL01 (WIL (Willapa R at Swiss Picknik Rd) shows the geometric mean of 184 exceeds the samples collected during 1998.								
24	10013	5	N	WILLAPA RIVER	YN05JR	14N	09W	24		Fecal Coliforn	n	Water
				Data from the Dept. of Ecology EIM database for the Project WRTMDL01 (WIL AL1 (WILLAPA R AT JOHNSON SL) shows the geometric mean of 6 does not from 24 samples collected during 1998.								

Data from the Dept. of Ecology EIM database for the Project WRTMDL01 (WILLAPA RIVER TMDL FOR FECALS AND DISSOLVED OXYGEN) station WRJS-AR1 (WILLAPA R AT JOHNSON SL) shows the geometric mean of 9 does not exceed the criterion and that 19 % of the samples exceeds the percentile criterion from 26 samples collected during 1998.

Newton et al. (1998) Dept. of Ecology Ambient Monitoring Station Station WPA003 (Willapa Bay - Willapa R. John. Slough) shows a geometric mean of 3 does not exceed the criterion and that 0% of the samples does not exceed the percentile criterion from 6 samples collected during 1994. Newton et al. (1998) Dept. of Ecology Ambient Monitoring Station Station WPA003 (Willapa Bay - Willapa R. John. Slough) shows a geometric mean of 11 does not exceed the criterion and that 22% of the samples exceed the percentile criterion from 9 samples collected during 1995. Newton et al. (1998) Dept. of Ecology Ambient Monitoring Station Station WPA003 (Willapa Bay - Willapa R. John. Slough) shows a geometric mean of 8 does not exceed the criterion and that 0% of the samples does not exceed the percentile criterion from 8 samples collected during 1996. Newton et al. (1998) Dept. of Ecology Ambient Monitoring Station WPA003 (Willapa Bay - Willapa R. John. Slough) shows a geometric mean of 8 does not exceed the criterion and that 0% of the samples does not exceed the percentile criterion from 11 samples collected during 1997. Newton et al. (1998) Dept. of Ecology Ambient Monitoring Station WPA003 (Willapa Bay - Willapa R. John. Slough) shows a geometric mean of 4 does not exceed the criterion and that 25% of the samples exceed the percentile criterion from 8 samples collected during 1999. Newton et al. (1998) Dept. of Ecology Ambient Monitoring Station Station WPA003 (Willapa Bay - Willapa R. John. Slough) shows a geometric mean of 2 does not exceed the criterion and that 0% of the samples does not exceed the percentile criterion from 8 samples collected during 1999. Newton et al. (1998) Dept. of Ecology Ambient Monitoring Station Station WPA003 (Willapa Bay - Willapa R. John. Slough) shows a geometric mean of 4 does not exceed the criterion and that 12% of the samples exceed the percentile criterion from 8 samples collected during 2000, with only 1 sample that exceeds the percentile criterion.

## 24 6844 5 N WILLAPA RIVER YN05JR 49.716 12N 08W 01 Temperature Water

Department of Ecology unpublished data from the Willapa TMDL Study shows a 7-day mean of daily maximum values of 19.9 for the week ending 14 August 2001 at station 8 (Willapa R abv Trap Creek). Department of Ecology unpublished data from the Willapa TMDL Study shows 8 excursions beyond the criterion during 2001

Data from the Dept. of Ecology EIM database for the Project WRTMDL01 (WILLAPA RIVER TMDL FOR FECALS AND DISSOLVED OXYGEN) station WRTR-1 (Willapa R abv Trap Creek) shows 0 excursions beyond the criterion out of 12 samples collected between 04/98 - 12/98.

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WRIA	Listing ID Cat	tegory	98 List?	Waterbody Name Basis	Location I	nformation	า			Parameter	Remarks	Medium
24	6847	5	N	WILLAPA RIVER  Department of Ecology unpublished data from the Willapa TMDL Study shows a 7-day mean 2001 at station 6 (Willapa R at SR6 nr Holcom). Department of Ecology unpublished data from the Willapa R at SR6 nr Holcom).			alues of	f 20.7	for the week ending		re	Water
24	6849	5	N	willapa River	YN05JR	41.711	13N	08W	48	Temperatur	re	Water
				Department of Ecology unpublished data from the Willapa TMDL Study shows a 7-day mean 2001 at station 4 (Willapa R at Oxbow Road).  Department of Ecology unpublished data from the Willapa TMDL Study shows 25 excursions	s beyond th	e criterion	during	2001	Ü	Ç		
24	6851	5	N	Data from the Department of Ecology EIM database for the Project WRTMDL01 (WILLAPA WROX-1 (Willapa R at Oxbow Road) shows 1 excursions beyond the criterion measured on WILLAPA RIVER			1,			EN) station  Temperatur	re	Water
		·		Department of Ecology unpublished data from the Willapa TMDL Study shows a 7-day mean 2001 at station 3 (Willapa R at SR 6 nr Menlo). Department of Ecology unpublished data fro during 2001	of daily m	aximum va	alues of	f 21.3 f	for the week ending	14 August		Traio.
				Data from the Dept. of Ecology EIM database for the Project WRTMDL01 (WILLAPA RIVER (Willapa R at SR 6 nr Menlo) shows 3 excursions beyond the criterion measured on these d						tation WRMN-	1	
24	6861	5	N	WILLAPA RIVER  Department of Ecology unpublished data from the Willapa TMDL Study shows a 7-day mean 2001 at station 2 (Willapa R. abv Mill creek). Department of Ecology unpublished data from during 2001		aximum va	alues of	f 23.1	for the week ending		re	Water
24	6866	5	N	WILLAPA RIVER  Department of Ecology unpublished data from the Willapa TMDL Study shows a 7-day mean 2001 at station 15 (Willapa R at Swiss Picknik). Department of Ecology unpublished data froduring 2001			alues of	f 18.2	for the week ending			Water
24	6868	5	N	WILLAPA RIVER  Department of Ecology unpublished data from the Willapa TMDL Study shows a 7-day mean 2001 at station 13 (Willapa R. abv Halfmoon Cr). Department of Ecology unpublished data for criterion during 2001			alues of	f 19.8	for the week ending		re	Water

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Data from the Dept. of Ecology EIM database for the Project WRTMDL01 (WILLAPA RIVER TMDL FOR FECALS AND DISSOLVED OXYGEN) station WRSW-1 (Willapa R at Swiss Picknik Rd) shows 0 excursions beyond the criterion out of 12 samples collected between 04/98 - 12/98.

WRIA	Listing ID C	ategory	98 List?	Waterbody Name	Location I	Informa	ation				Parameter		Medium
				Basis								Remarks	
24	6870	5	N	WILLAPA RIVER	YN05JR	56.6	59 12	2N 0	)7W	04	Temperature		Water
43027.				Department of Ecology unpublished data from the Willapa TMDL Study shows a 7-day mear 2001 at station 11 (Willapa R at Lebam). Department of Ecology unpublished data from the									cause it errantly identified the location as ugh" and "at Lebam". See Listing ID
40027.				2001.								01/06/05 -kk	
				Data from the Dept. of Ecology EIM database for the Project WRTMDL01 (WILLAPA RIVER (Willapa R at Lebam) shows 0 excursions beyond the criterion out of 12 samples collected b				ND DI	SSOL	LVED OXYGEN) sta	ation WRLE-1		
24	6871	5	N	WILLAPA RIVER	YN05JR	52.5	59 13	3N 0	)7W	32	Temperature		Water
				Department of Ecology unpublished data from the Willapa TMDL Study shows a 7-day mear 2001 at station 10 (Willapa abv Fork at Doyle). Department of Ecology unpublished data froduring 2001	•					•	•		
24	6872	5	Υ	WILLAPA RIVER	YN05JR	28.1	147 13	3N 0	W80	52	Temperature		Water
				Department of Ecology unpublished data from the Willapa TMDL Study shows a 7-day mear 2001 at station 1 (Willapa R at Camp One Rd). Department of Ecology unpublished data from during 2001.									
				Scholz, 1999, shows a 7-day mean of maximum daily temperature of 16 degrees C, with a measurements collected in 1998 at Mad River above Berg Creek.	naximum da	aily ten	nperatu	ire of	16.9	degrees C from cor	ntinuous		
				Data from the Dept. of Ecology EIM database for the Project WRTMDL01 (WILLAPA RIVER (Willapa R at Camp One Rd) shows 5 excursions beyond the criterion measured on these databases.									
				Dept. of Ecology unpublished data from core ambient monitoring station 24B090 (Willapa R. for mid-week 11 August 2001.	near Willap	pa) sh	nows a 7	7-day	mear	n of daily maximum	values of 22		
				Hallock (2001) Dept. of Ecology Ambient Monitoring Station 24B090 (WILLAPA RIVER NEA samples collected between 1993 - 2001	R WILLAP	A) sho	ows 3 ex	xcursi	ions b	beyond the criterion	out of 41		
24	43027	5	N	WILLAPA RIVER	YN05JR	14.7	735 14	4N 0	)8W	20	Temperature		Water
				Data from the Dept. of Ecology EIM database for the Project WRTMDL01 (WILLAPA RIVER (Willapa R near Ellis Slough) shows 2 excursions beyond the criterion measured on these databases.					SSOI	LVED OXYGEN) sta	ation WREL-1	, ,	6870 on 01/06/05. Previous listing d listings near Ellis Slough with listings
24	14916	5	N	WILLAPA RIVER, S.F.	IK15OR	1.43	39 14	4N 0	)8W	19	Dissolved ox	xygen	Water
				Data from the Dept. of Ecology EIM database for the Project WRTMDL01 (WILLAPA RIVER (South Fork Willapa R @ 101 Br) shows 4 excursions beyond the criterion measured on these contents of the project will be a supplied to the contents of the project will be a supplied to the contents of the project will be a supplied to the							station SFRK-1		s, data for current study show ett, ECY/EAP 11/03).
				Data from the Dept. of Ecology EIM database for the Project WRTMDL01 (WILLAPA RIVEI (South Fork Willapa R @ 101 Br) shows 3 excursions beyond the criterion measured on the							station SFRK-1		

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Data from the Dept. of Ecology EIM database for the Project WRTMDL01 (WILLAPA RIVER TMDL FOR FECALS AND DISSOLVED OXYGEN) station WILSON-1 (Wilson Creek) shows the geometric mean of 89 does not exceed the criterion and that 29 % of the samples exceeds the percentile criterion from 7 samples collected during 1998.

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